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RAW SEQUENCE LISTING

DATE: 01/02/2002

PATENT APPLICATION: US/10/014,128

TIME: 15:05:37

Input Set : A:\ES.txt

Output Set: N:\CRF3\01022002\J014128.raw

| | ou chan poor in form formation | |
|-----------|---|------------|
| 3 <11 | 0> APPLICANT: INVITROGEN CORPORATION | ENTERED |
| 5 | CARRINO, John | |
| 7 | FAN, James | |
| 9 | BENNETT, Robert | |
| 11 | CHESNUT, Jonathan | |
| 13 | GLEESON, Martin | |
| 15 | MADDEN, Knut | |
| 19 <12 | 0> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR RAPIDLY | GENERATING |
| 20 | RECOMBINANT NUCLEIC ACID MOLECULES | |
| 24 <13 | 0> FILE REFERENCE: INVIT1290-2 | |
| C> 28 <14 | 0> CURRENT APPLICATION NUMBER: US/10/014,128 | |
| | 1> CURRENT FILING DATE: 2001-12-07 | |
| | 0> PRIOR APPLICATION NUMBER: US 60/254,510 | |
| | 1> PRIOR FILING DATE: 2000-12-08 | |
| | 0> PRIOR APPLICATION NUMBER: US 60/326,092 | |
| | 1> PRIOR FILING DATE: 2001-09-28 | • |
| | 0> NUMBER OF SEQ ID NOS: 47 | |
| | 0> SOFTWARE: PatentIn version 3.0 | |
| | 0> SEQ ID NO: 1 | |
| | 1> LENGTH: 27 2> TYPE: DNA | |
| | 3> ORGANISM: ARTIFICIAL SEQUENCE | |
| | 0> FEATURE: | |
| | 3> OTHER INFORMATION: PRIMER MTH1 | |
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| | gtatcat acacatacga tttaggt | 27 |
| | 0> SEQ ID NO: 2 | |
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| 78 <21 | 3> ORGANISM: ARTIFICIAL SEQUENCE | |
| 82 <22 | 0> FEATURE: | |
| 84 <22 | 3> OTHER INFORMATION: PRIMER MTH2 | |
| | 0> SEQUENCE: 2 | |
| | gcctctc cccgcgcgtt | 20 |
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| | 1> LENGTH: 34 | |
| | 12> TYPE: DNA | |
| | 13> ORGANISM: ARTIFICIAL SEQUENCE | |
| | 20> FEATURE: 23> OTHER INFORMATION: PRIMER GAL4r2 | |
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| | tccgaagg gggcgataca gtcaactgtc tttg | 34 |
| | 10> SEQ ID NO: 4 | 4 |
| | 11> LENGTH: 36 | |
| | 12> TYPE: DNA | |
| | 13> ORGANISM: ARTIFICIAL SEQUENCE | |
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130 <220> FEATURE:

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Input Set : A:\ES.txt
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| | <223> OTHER INFORMATION: PRIMER MTH5 | |
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| | <211> LENGTH: 34 | |
| | <212> TYPE: DNA | |
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| | <223> OTHER INFORMATION: PRIMER VP16r2 <400> SEQUENCE: 5 | |
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| | gttccgaagg gccaccgtac tcgtcaattc caag <210> SEQ ID NO: 6 | J . |
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| 210 | ctctgacttg agcgtcgatt tt | 22 |
| 216 | <210> SEQ ID NO: 8 | |
| | <211> LENGTH: 32 | |
| | <212> TYPE: DNA | |
| | <213> ORGANISM: ARTIFICIAL SEQUENCE | |
| | <220> FEATURE: | |
| | <223> OTHER INFORMATION: PRIMER p53f2 | |
| | <400> SEQUENCE: 8 | 32 |
| | cggaacaagg ggaattccct gtcaccgaga cc | <i>3</i> <u>Z</u> |
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| | <212> TYPE: DNA <213> ORGANISM: ARTIFICIAL SEQUENCE | |
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| | <212> TYPE: DNA | |
| | <213> ORGANISM: ARTIFICIAL SEQUENCE | |
| | <220> FEATURE: | |
| | <223> OTHER INFORMATION: PRIMER CMVr2 | |
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RAW SEQUENCE LISTING

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Input Set : A:\ES.txt

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| 300 | <223> OTHER INFORMATION: PRIMER CMVf | |
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| 306 | aattcacatt gattattgag tagtta | 26 |
| 312 | <210> SEQ ID NO: 12 | |
| 314 | <211> LENGTH: 30 | |
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| 324 | <223> OTHER INFORMATION: PRIMER GFP-Xhof | |
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| 330 | tcgaaagggt aatggccagc aaaggagaag | 30 |
| 336 | <210> SEQ ID NO: 13 | |
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| 420 | <223> OTHER INFORMATION: PRIMER CMVr2 | |
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Input Set : A:\ES.txt
Output Set: N:\CRF3\01022002\J014128.raw

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| | <400> SEQUENCE: 17 | 30 |
| | cggaacaagg gatggccagc aaaggagaag | 30 |
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| | <223> OTHER INFORMATION: PRIMER GFPr3 | |
| | <400> SEQUENCE: 18 | 31 |
| | taggccaagg gtttgtagag ctcatccatg c | 31 |
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| | <212> TYPE: DNA | |
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| | <223> OTHER INFORMATION: PRIMER BGHf3 | |
| | <400> SEQUENCE: 19 | 29 |
| | ggcctaaagg gtgaatgggg ccgcatagt | 43 |
| | <210> SEQ ID NO: 20 | |
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| | <212> TYPE: DNA | |
| | <213> ORGANISM: ARTIFICIAL SEQUENCE | |
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| | <223> OTHER INFORMATION: PRIMER T7top | |
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| | gaaggagtaa tacgactcac tatagggagc caccatgggc ccttcggaac | 50 |
| | <210> SEQ ID NO: 21 | |
| | <211> LENGTH: 50 | |
| | <212> TYPE: DNA | |
| | <213> ORGANISM: ARTIFICIAL SEQUENCE | |
| | <220> FEATURE: <223> OTHER INFORMATION: PRIMER T7bottom | |
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| | <211> LENGTH: 21 | |
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| | <223> OTHER INFORMATION: PRIMER T7amp | |
| | <2235 OTHER INFORMATION. FRIMER 174mp <4005 SEQUENCE: 22 | |
| | gaaggagtaa tacgactcac t | 21 |
| 570 | gaaggagtaa taogao toao t | |
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RAW SEQUENCE LISTING

DATE: 01/02/2002

PATENT APPLICATION: US/10/014,128

TIME: 15:05:37

Input Set : A:\ES.txt
Output Set: N:\CRF3\01022002\J014128.raw

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| | <223> OTHER INFORMATION: PRIMER T3top | |
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| | ggcctaaagg gtccctttag tgagggttaa ttgcgcgc | 38 |
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| | <212> TYPE: DNA | |
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| | <220> FEATURE: | |
| | <223> OTHER INFORMATION: PRIMER T3bottom | |
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| 642 | cggaacaagg gatgatagat cccgtcgttt taca | 34 |
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| | <212> TYPE: DNA | |
| | <213> ORGANISM: ARTIFICIAL SEQUENCE | |
| | <220> FEATURE: | |
| | <223> OTHER INFORMATION: PRIMER lac21k2 | |
| | <400> SEQUENCE: 26 | 10 |
| | taggecaagg ggaccatttt caatcegeae ct | 32 |
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| | <212> TYPE: DNA | |
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| | <223> OTHER INFORMATION: PRIMER lacZ2k2 | |
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| | taggccaagg ggaggcactt caccgcttgc ca | 32 |
| | <210> SEQ ID NO: 28 | |
| | <211> LENGTH: 33 | |
| | <212> TYPE: DNA | |
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| | <220> FEATURE: | |
| | <223> OTHER INFORMATION: PRIMER lacZ3k2 | |
| | <400> SEQUENCE: 28 | 22 |
| | taggccaagg gtttgacacc agaccaactg gta | 33 |
| 720 | <210> SEQ ID NO: 29 | |
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/014,128

DATE: 01/02/2002 TIME: 15:05:38

Input Set : A:\ES.txt

Output Set: N:\CRF3\01022002\J014128.raw

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